APPENDIX D
Committee, Expert Adviser, and Staff Biographies

Daniel D. Federman, M.D., *Chair,* is senior dean for clinical teaching and the Carl W. Walter Distinguished Professor of Medicine and Medical Education at Harvard Medical School. He graduated from Harvard College and Harvard Medical School and completed his internship and residency at Massachusetts General Hospital. Dr. Federman conducted research and trained in endocrinology at the National Institutes of Health, the University College Hospital Medical School in London, and Massachusetts General Hospital, where he served as a physician, chief of the Endocrine Unit, and associate chief of medical services. During his 4-year tenure at Stanford University Medical School, he was physician –in chief, the Arthur F. Bloomfield Professor of Medicine, and chair of the Department of Medicine. In 1977, Dr. Federman returned to Harvard Medical School, where he has held the posts of dean for students and alumni, dean for medical education, and professor of medicine. He has served as chair of the Board of Internal Medicine and president of the American College of Physicians. He is a member of the Institute of Medicine and served on the Committee on Understanding the Biology of Sex and Gender Differences.

Daniel L. Azarnoff, M.D., is president of D. L. Azarnoff Associates and senior vice president of Clinical and Regulatory Affairs of Cellegy Pharmaceuticals. He has more than 20 years of academic experience in research and clinical medicine. For 8 years Dr. Azarnoff served as president of research and development for the Searle Pharmaceutical Company, and for the past 14 years he has served as a consultant in drug development. Before joining Searle he was Distinguished Professor of Medicine and Pharmacology and director of the Clinical Pharmacology Toxicology Center at the University of Kansas Medical Center, a

job he held for 16 years. He has published more than 175 articles in scientific and medical journals. Dr. Azarnoff is a member of the Institute of Medicine and a fellow of the American Association of Pharmaceutical Scientists, the New York Academy of Sciences, and the American College of Physicians and is chair-elect of the Pharmaceutical Section of the American Association for the Advancement of Science. He maintains a teaching appointment at the schools of medicine of the University of Kansas and Stanford University. Dr. Azarnoff has been on the editorial boards of several journals and on committees of the U.S. Food and Drug Administration, World Health Organization, American Medical Association, National Academy of Sciences, Institute of Medicine, and National Institutes of Health, advising them on drugs and drug development.

Tom L. Beauchamp, Ph.D., is professor of philosophy and senior research scholar at the Kennedy Institute of Ethics. He was born in Austin, Texas. He received graduate degrees from Yale University and the Johns Hopkins University, where he received a Ph.D. in 1970. He then joined the faculty of the Philosophy Department at Georgetown University and in the mid-1970s accepted a joint appointment at the Kennedy Institute of Ethics. In 1976, he joined the staff of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, where he wrote the bulk of *The Belmont Report* (1978). Dr. Beauchamp's research interests are in Hume and the history of modern philosophy and practical ethics, especially biomedical ethics and business ethics. Publications include the following coauthored works: *Hume and the Problem of Causation* (Oxford University Press, 1981), *Principles of Biomedical Ethics* (Oxford University Press, 1979; 4th ed., 1994), *A History and Theory of Informed Consent* (Oxford University Press, 1986), and *Philosophical Ethics* (McGraw-Hill, 1982; 2nd ed., 1991). Publications also include a number of edited and coedited anthologies and more than 100 scholarly articles in journals and books. Dr. Beauchamp is the General Editor—with David Fate Norton and M. A. Stewart—of *The Critical Edition of the Works of David Hume*, Clarendon Press, Oxford University Press. He is also the editor of an electronic edition called HUMETEXT (coeditor, David Fate Norton), a complete electronic edition of Hume's philosophical, political, and literary works.

Timothy Stoltzfus Jost, J.D., is the Newton D. Baker-Baker and Hostetler Professor of Law and also a professor of health services management at the College of Medicine and Public Health, Ohio State University. He is the author of a book on comparative health law and a coauthor of casebooks in health law and in property law and has published a number of articles concerning health care regulation and comparative health law. Professor Jost has served as a consultant to the Institute of Medicine, the Administrative Conference of the United States, and the American Bar Association's Commission of Legal Problems of the Elderly and was a member of the State of Ohio Medical Board. A recipient of a

Western European Regional Research Fulbright Grant, Professor Jost spent the winter and spring of 1989 at the Oxford University Centre for Socio-Legal Studies. He was also a guest professor at the University of Goettingen in Germany on a Fulbright grant in 1996–1997. In 2000, Professor Jost received the Jay Healey Distinguished Health Law Teacher Award from the American Society of Law, Medicine, and Ethics. He earned a B.A. in history at the University of California, Santa Cruz, and a J.D. from the University of Chicago.

Patricia A. King, J.D., is the Carmack Waterhouse Professor of Law, Medicine, Ethics and Public Policy at Georgetown University Law Center. She is also an adjunct professor in the Department of Health Policy and Management, School of Hygiene and Public Health, Johns Hopkins University, and chair of the board of trustees of Wheaton College. She is the coauthor of *Cases and Materials on Law, Science, and Medicine* and an area editor of the *Encyclopedia of Bioethics* (MacMillan Publishing Company). A member of the American Law Institute, she is also a fellow of the Hastings Center and a senior research scholar at the Kennedy Institute of Ethics. She has served on numerous committees of the Institute of Medicine. Her work in the field of bioethics has included service as cochair for policy of the Embryo Research Panel, National Institutes of Health; the U.S. Department of Health, Education, and Welfare Recombinant DNA Advisory Committee; the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research; the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research; and the Ethics, Legal and Social Issues Working Group of the Human Genome Project. She is also a member of the boards of the National Partnership for Women and Families and the Hospice Foundation. Before joining Georgetown University, she was the deputy director of the Office of Civil Rights at the U.S. Department of Health, Education, and Welfare and special assistant to the chair of the Equal Employment Opportunity Commission. She also served as a deputy assistant attorney general in the Civil Division of the U.S. Department of Justice. Ms. King received a B.A. from Wheaton College and a J.D. from Harvard Law School.

Roderick J. A. Little, Ph.D., is professor and chair of the Department of Biostatistics of the School of Public Health at the University of Michigan. He has also been a professor in the Department of Biomathematics at the University of California, Los Angeles, School of Medicine and a scientific associate for the World Fertility Survey. Little has been an American Statistical Association/U.S. Bureau of the Census/National Science Foundation research fellow and has held faculty positions at the George Washington University and the University of Chicago. He is a fellow of the American Statistical Association and an elected member of the International Statistical Institute. He received a Ph.D. in statistics from London University's Imperial College. He is currently a member of the

National Research Council's Committee on National Statistics. He has expertise in the areas of survey sampling and statistical analysis of incomplete data and has broad experience with applications of statistics to demography, the social sciences, and biomedical research.

James McNulty serves on the board and the Executive Committee of the National Alliance for the Mentally Ill (NAMI), Rhode Island, as well as the Mental Health Consumer Advocates of Rhode Island, a statewide organization for mental health consumers. Having experienced the full impact of mental illness personally, he has been active in involving patient and family advocates in all aspects of treatment of mental illness. Mr. McNulty is a member of the Board of Directors of NAMI National and is president of the Manic Depressive & Depressive Association of Rhode Island. He served on the Protection and Advocacy Program for Persons with Mental Illness advisory committee for Rhode Island, as well as the board of the Rhode Island Protection Advocacy Services Agency. For several years, Mr. McNulty served on the Institutional Review Board of Butler Hospital, a freestanding psychiatric teaching hospital affiliated with the Brown University School of Medicine. He began his service with the Human Subjects Research Council Workgroup of the National Advisory Mental Health Council in 1999. He is a member of the Executive Committee of the Clinical Antipsychotic Trials of Intervention Effectiveness Project, a National Institute of Mental Health-funded multisite research protocol evaluating the efficacy of atypical antipsychotics in schizophrenia and Alzheimer's disease. Mr. McNulty also serves on the Governor's Council on Mental Health in Rhode Island and the National Advisory Mental Health Council.

Anne C. Petersen, Ph.D., has been senior vice president for programs at the W. K. Kellogg Foundation since 1996. Dr. Petersen was deputy director and chief operating officer of the National Science Foundation from 1994 to 1996, the first woman in the agency's 45-year history to serve in that position. She also served as the vice president for research, as well as dean of the Graduate School, at the University of Minnesota. Dr. Petersen has authored many books and articles on adolescence, gender, and research methods and is a fellow of the American Association for the Advancement of Science, the American Psychological Association, the Institute of Medicine, and is on the Executive Committee of the International Society for the Study of Behavioral Development, among other societies. In addition, she is a member of the National Advisory Mental Health Council at the National Institutes of Health, , and Board of Trustees of the National Institute of Statistical Sciences, among other boards and councils. She holds a bachelor's degree in mathematics; a master's degree in statistics; and a doctorate in measurement, evaluation, and statistical analysis, all from the University of Chicago.

Bonnie W. Ramsey, M.D., is director of the Pediatric General Clinical Research Center and Cystic Fibrosis Research Center at Children's Hospital and Regional Medical Center in Seattle. She is a professor in the Department of Pediatrics and program director, Core Center for Gene Therapy, University of Washington School of Medicine. She also is the director of the Cystic Fibrosis Foundation's newly formed Therapeutics Development Network Coordinating Center. Dr. Ramsey is an active member of several national professional societies including the American Thoracic Society and the American Academy of Pediatrics, serves on the Board of Trustees of the Cystic Fibrosis Foundation, and is chair of the Medical Advisory Committee for the National Cystic Fibrosis Foundation. She also serves as an ad hoc reviewer for the *New England Journal of Medicine*, *Journal of Pediatrics*, *Human Gene Therapy*, *Pediatric Pulmonology*, and *American Journal of Respiratory and Critical Care Medicine*. Dr. Ramsey has served on several government agency advisory panels including the Pulmonary Advisory Board, U.S. Food and Drug Administration, and advisory review groups for the National Heart, Lung, Blood Institute, National Institute of Diabetes and Digestive and Kidney Diseases, and National Center for Research Resources. Dr. Ramsey earned an undergraduate degree from Stanford University and a medical degree from Harvard Medical School.

Lydia Villa-Komaroff, Ph.D., is professor of neurology and vice president for research at Northwestern University, where she is responsible for policy formulation, strategy design, and operational oversight of the research infrastructure. She received an A.B. in biology from Goucher College and a Ph.D. in cell biology from the Massachusetts Institute of Technology. During her research career, she gained international recognition as a molecular biologist and was a key member of the team that first demonstrated that bacterial cells could produce insulin. Dr. Villa-Komaroff was an associate professor of neurology at Harvard Medical School and Children's Hospital and associate director of the Division of Neuroscience at Children's Hospital in Boston. She has published more than 60 articles and reviews and has served on a number of review committees for the National Institutes of Health. She was a member of the Advisory Committee for the Biology Directorate of the National Science Foundation (chair from 1997 to 1998), was a member of the congressionally mandated National Science Foundation Committee on Equal Opportunity in Science and Engineering, and was an invited participant in the Forum on Science in the National Interest sponsored by the White House Office of Science and Technology Policy. She is a founding member of the Society for the Advancement of Chicanos and Native Americans in Science and has served as a board member and vice president.

Frances M. Visco, J.D., has served as president of the National Breast Cancer Coalition (NBCC), an organization dedicated to eradicating breast cancer through action and advocacy, since its inception in 1991. Ms. Visco is a two-

term member of President Bill Clinton's Cancer Panel, chair of the National Action Plan on Breast Cancer, past chair of the National Action Plan on Breast Cancer, and immediate past chair of the Integration Panel of the U.S. Department of Defense Peer-Reviewed Breast Cancer Research Program. After her own successful battle with breast cancer, she began her crusade as a breast cancer activist with the Linda Creed Breast Cancer Foundation. She continues to serve on the board of that foundation and is active in many of its programs. Until April 1995, Ms. Visco was a commercial litigator and partner at the law firm of Cohen, Shapiro, Polisher, Shiekman & Cohen in Philadelphia. Ms. Visco graduated from St. Joseph's University and Villanova Law School. She is currently serving on the National Cancer Policy Board.

EXPERT ADVISERS

Kay Dickersin, Ph.D., is associate professor, Department of Community Health, Brown University School of Medicine, is codirector of the New England Cochrane Center within the Cochrane Collaboration, which aims to facilitate systematic reviews of randomized controlled trials across all areas of health care. She is also adjunct associate professor in the Department of Epidemiology and Preventive Medicine at the University of Maryland School of Medicine, adjunct associate professor at the Johns Hopkins University Department of Epidemiology and director of clinical care at Tufts University Department of Medicine. Her primary academic interests are evidence-based medicine, clinical trial design, and meta-analysis. Dr. Dickersin directs the coordinating center for two federally funded, multicenter randomized trials: the Ischemic Optic Decompression Trial and the Surgical Treatments Outcomes Project for Dysfunctional Uterine Bleeding. She is on the Board of Directors for the Society for Clinical Trials and has served on the Institutional Review Board at the Johns Hopkins School of Hygiene and Public Health. From 1994 to 2000 she served on the National Cancer Advisory Board. She received a B.A. and an M.A. in zoology at the University of California, Berkeley, and then earned a Ph.D. in epidemiology at the Johns Hopkins University.

Alberto Grignolo, Ph.D., is senior vice president and general manager for Worldwide Regulatory Affairs at PAREXEL International, a contract research organization, where he is responsible for the company’s regulatory services, including worldwide registration strategies and submissions, regulatory compliance, and clinical quality assurance for pharmaceuticals, biologicals, and medical devices. An internationally recognized regulatory professional and public speaker, Dr. Grignolo joined PAREXEL in 1992 as head of worldwide regulatory consulting services. Before going to PAREXEL, he held a series of regulatory and executive management positions at SmithKline Beecham and Fidia Pharmaceutical. A long-standing member of the Regulatory Affairs Profession-

als Society, he was president and chairman of the board from 1991 to 1992. Dr. Grignolo is currently a member of the Board of Directors of the Drug Information Association (DIA). He is chair of the Regulatory Track of the 2001 DIA Annual Meeting and serves on the Steering Committee of the Americas, the Regulatory Special Interest Advisory Committee, the Marketing Committee, and the Regulatory Training Faculty. Dr. Grignolo holds a Ph.D. in experimental psychology from the University of North Carolina and a B.S. in psychology from Duke University.

Mary Faith Marshall, Ph.D., B.S.N., is professor of medicine and bioethics at Kansas University Medical Center, where she also holds joint appointments in the School of Nursing and Allied Health and the Department of History and Philosophy of Medicine and serves on the Institutional Review Board and the Conflict of Interest Committee. She is principal investigator of the Research Integrity Project at the Midwest Bioethics Center. At the U.S. Department of Health and Human Services she serves as chair of the National Human Research Protections Advisory Committee and an expert adviser to the Office for Human Research Protections on research involving children and prisoners. At the National Institutes of Health, Dr. Marshall served on the first special research ethics review panel advisory to the director and sits on the Cardiology and Hematology Data Safety and Monitoring Boards of the National Heart, Lung, and Blood Institute. She is a past president of the American Society for Bioethics and Humanities. Dr. Marshall received a B.S.N. and a Ph.D. in religious studies (applied ethics) from the University of Virginia. She has published numerous books, chapters, and articles in the fields of perinatal substance abuse as well as clinical and research ethics.

Carol Saunders, R.N., is president and chief executive officer of the Center for Clinical Research Practice, a corporation that produces and publishes educational and management resources for institutions, sponsors, and clinical research professionals. She is executive director of the New England Institutional Review Board, which provides ethical review services for sponsors and investigators of drug and device studies. Coeditor of *Research Practitioner*, she has published extensively and lectured on a broad range of research-related topics and has been recognized for excellence in medical communications by the American Medical Writers Association. She has coauthored several textbooks on clinical research and human subject protection, including standard operating procedures for investigative sites. She earned a B.S.N. from Boston College and serves as consulting faculty at Duke University.

Dennis Tolsma, M.P.H., is director of the Division of Clinical Quality Improvement and director of research at Kaiser Permanente in Atlanta. He is chair-elect (2001–2002) for the Board of HMO Research Network, chair of the Sci-

ence Steering Committee for a Centers for Disease Control and Prevention research contract with the Alliance for Community Health Programs and America Association of Health Plans Science Committee, and a member of Kaiser Permanente Research Advisory Council. From 1994 to 1998, he was director of prevention and practice analysis for Kaiser Permanente and chaired the company's Institutional Review Board from 1995 to 1999. Before joining Kaiser, he was associate director of public health practice at the Centers for Disease Control and Prevention. He received an A.B. in mathematics and English from Calvin College and an M.P.H. from Columbia University.

LIAISONS

Richard J. Bonnie, L.L.B., is John S. Battle Professor of Law at the University of Virginia School of Law and director of the University's Institute of Law, Psychiatry, and Public Policy. He previously served as associate director of the National Commission on Marijuana and Drug Abuse, a member of the National Advisory Council on Drug Abuse, chair of Virginia's State Human Rights Committee responsible for protecting the rights of persons with mental disabilities, adviser for the American Bar Association's Criminal Justice Mental Health Standards Project, and a member of the John D. and Catherine T. MacArthur Foundation Research Network on Mental Health and the Law. He was a member of a delegation of the U.S. State Department that assessed changes in the Soviet Union relating to political abuse of psychiatry and is a member of the Board of Directors of the Geneva Initiative on Psychiatry. Mr. Bonnie is a member of the Institute of Medicine and has also served on and chaired numerous Institute of Medicine committees. In addition, he serves as an adviser to the American Psychiatric Association's Council on Psychiatry and Law and received the American Psychiatric Association's prestigious Isaac Ray Award in 1998 for contributions to forensic psychiatry and the psychiatric aspects of jurisprudence. Mr. Bonnie is a liaison from the IOM Board on Neuroscience and Behavioral Health.

Nancy Neveloff Dubler, L.L.B., is the director of the Division of Bioethics, Department of Epidemiology and Social Medicine, Montefiore Medical Center, and professor of bioethics at the Albert Einstein College of Medicine. She received a B.A. from Barnard College and an LL.B. from Harvard Law School. Ms. Dubler founded the Bioethics Consultation Service at Montefiore Medical Center in 1978 as a support for analysis of difficult cases presenting ethical issues in the health care setting. She lectures extensively and is the author of numerous articles and books on termination of care, home care and long-term care, geriatrics, prison and jail health care, and AIDS. She is codirector of the Certificate Program in Bioethics and the Medical Humanities, conducted jointly by Montefiore Medical Center, Albert Einstein College of Medicine, and The Hartford Institute of Geriatric Nursing at New York University. Her most recent

books are *Ethics on Call: Taking Charge of Life and Death Choices in Today's Health Care System*, published by Vintage in 1993, and *Mediating Bioethical Disputes*, published in 1994 by the United Hospital Fund in New York City. She consults often with federal agencies, national working groups, and bioethics centers and served as cochair of the Bioethics Working Group at the National Health Care Reform Task Force. Ms. Dubler is a liaison from the Board on Health Sciences Policy.

Elena Ottolenghi Nightingale, M.D., Ph.D., is a volunteer scholar-in-residence at the National Research Council and the Institute of Medicine (IOM) and adjunct professor of pediatrics at both Georgetown University Medical Center and George Washington University Medical Center. Dr. Nightingale serves as liaison or adviser to several IOM activities and is a member emerita of the IOM Board on Health Promotion and Disease Prevention.. For more than 11 years she was special adviser to the president and senior program officer at Carnegie Corporation of New York and lecturer in social medicine at Harvard University. She retired from both positions at the end of 1994. Dr. Nightingale earned an A.B. degree in zoology, summa cum laude, from Barnard College of Columbia University, a Ph.D. in microbial genetics from the Rockefeller University, and an M.D. from New York University School of Medicine. She is a fellow of the American Association for the Advancement of Science, the New York Academy of Sciences, and the Royal Society of Medicine. She has authored numerous book chapters and articles on microbial genetics, health (particularly child and adolescent health and well-being and health promotion and disease prevention), health policy, and human rights. Her current research interest is in improving the safety and security of young adolescents in the United States. Dr. Nightingale continues to be active in the protection of human rights, particularly those of children. She also continues to work on enhancing the participation of health professionals and health professional organizations in the protection of human rights. She has lectured and written widely on these topics, particularly on the role of physicians as perpetrators and protectors of human rights. Currently she serves on the Advisory Committee of the Children's Rights Division of Human Rights Watch. She has also served on the Board of the Children's Research Institute of the Children's National Medical Center in Washington, D.C., and is on the Institutional Review Board of that institution. Dr. Nightingale is a liaison from the IOM Board on Children, Youth, and Families.

Pilar Ossorio, Ph.D., J.D., is assistant professor of law and medical ethics at the University of Wisconsin at Madison. Before taking her position at the University of Wisconsin, she was director of the Genetics Section at the Institute for Ethics of the American Medical Association. Dr. Ossorio received a Ph.D. in microbiology and immunology in 1990 from Stanford University. She went on to complete a postdoctoral fellowship in cell biology at Yale University School

of Medicine. Throughout the early 1990s, Dr. Ossorio also worked as a consultant for the federal program on the Ethical, Legal, and Social Implications (ELSI) of the Human Genome Project, and in 1994 she took a full-time position with the U.S. Department of Energy's ELSI program. In 1993, she served on the Ethics Working Group for President Bill Clinton's Health Care Reform Task Force. Dr. Ossorio received a J.D. from the University of California at Berkeley School of Law (Boalt Hall) in 1997. She was elected to the legal honor society Order of the Coif and received several awards for outstanding legal scholarship. Dr. Ossorio is a fellow of the American Association for the Advancement of Science (AAAS), a past member of AAAS's Committee on Scientific Freedom and Responsibility, and a member of the National Cancer Policy Board and has been a member or chair of several working groups on genetics and ethics. She has published scholarly articles in bioethics, law, and molecular biology. Dr. Ossorio is a liaison from the IOM National Cancer Policy Board.

STUDY STAFF

Laura Lyman Rodriguez, Ph.D., is a senior program officer for the Board on Health Sciences Policy at the Institute of Medicine and is the study director for Assessing the System for Protecting Human Research Subjects. She came to the Institute of Medicine from the Office of Public Affairs at the Federation of American Societies for Experimental Biology (FASEB), where she was a policy analyst covering human subjects research and institutional review board issues, bioethics, and federal funding priorities. Before her tenure at FASEB, Dr. Rodriguez was a congressional fellow in the office of Representative Vernon J. Ehlers (MI), where she focused on national science policy issues and math and science education from kindergarten through grade 12. Dr. Rodriguez has expertise in cell biology and genetics and is particularly interested in clinical research issues and the policy implications of genomics.

Robert Cook-Deegan, M.D., is a senior program officer for the National Cancer Policy Board, Institute of Medicine (IOM), and Commission on Life Sciences (National Academy of Sciences), and for IOM's Health Sciences Policy Board. He is also a Robert Wood Johnson Health Policy Investigator at the Kennedy Institute of Ethics, Georgetown University, where he is writing a primer on how national policy decisions are made about health research, and a seminar leader for the Stanford-in-Washington program, for which he recently directed a world survey of genomics research.

Jessica Aungst is a research assistant in the Division of Health Sciences Policy of the Institute of Medicine. She received a degree in English with a minor in sociology from the State University of New York, Geneseo. Upon graduating,

she moved to Washington, D.C., to work for an international newsletter before joining the Institute of Medicine.

Natasha S. Dickson is a senior project assistant with the National Academy of Sciences' Institute of Medicine in Washington DC. She is a graduate of St. Augustine Senior Comprehensive Secondary School in Trinidad and Tobago. She gained most of her administrative experience while working as a clerical assistant at the University of the West Indies, St. Augustine, Trinidad. She also worked as an advertising sales representative and freelance reporter for the Trinidad Express Newspapers before moving to the U.S.A. in March 2000. She became an administrative receptionist for telecommunications lobbyists Simon Strategies LLC before joining the National Academies in March 2001.

IOM BOARD ON HEALTH SCIENCES POLICY STAFF

Andrew Pope, Ph.D., is director of the Board on Health Sciences Policy at the Institute of Medicine. With expertise in physiology and biochemistry, his primary interests focus on environmental and occupational influences on human health. Dr. Pope's previous research activities focused on the neuroendocrine and reproductive effects of various environmental substances on food-producing animals. During his tenure at the National Academy of Sciences and since 1989 at the Institute of Medicine, Dr. Pope has directed numerous studies; the topics of those studies include injury control, disability prevention, biologic markers, neurotoxicology, indoor allergens, and the enhancement of environmental and occupational health content in medical and nursing school curricula. Most recently, Dr. Pope directed studies on priority-setting processes at the National Institutes of Health, fluid resuscitation practices in combat casualties, and organ procurement and transplantation.

CONSULTANT

Kathi E. Hanna, M.S., Ph.D., is a science and health policy consultant specializing in biomedical research policy and bioethics. She has served as research director and senior consultant to the National Bioethics Advisory Commission and as senior adviser to the President's Advisory Committee on Gulf War Veterans Illnesses. In the 1980s and early 1990s, Dr. Hanna was a senior analyst at the now defunct congressional Office of Technology Assessment, contributing to numerous science policy studies requested by committees of the U.S. House and U.S. Senate on science education, research funding, biotechnology, women's health, human genetics, bioethics, and reproductive technologies. In the past decade she has served as a consultant to the Howard Hughes Medical Institute, the National Institutes of Health, the Institute of Medicine, and several charitable foundations. In the early 1980s, Dr. Hanna staffed committees of the American

Psychological Association that were responsible for oversight of policies related to the protection of human participants in research and animal research. Before coming to Washington, D.C., she was the genetics coordinator at Children's Memorial Hospital in Chicago, where she directed clinical counseling and coordinated an international research program investigating prenatal diagnosis of cystic fibrosis. Dr. Hanna received an A.B. in biology from Lafayette College, an M.S. in human genetics from Sarah Lawrence College, and a Ph.D. from the School of Business and Public Management, George Washington University.